

# SPOTTED SEATROUT STATEWIDE AND BASIN TRENDS, ASSESSMENT, AND MANAGEMENT OPTIONS

Jason Adriance | LWFC Meeting | November 4, 2021

#### Introduction

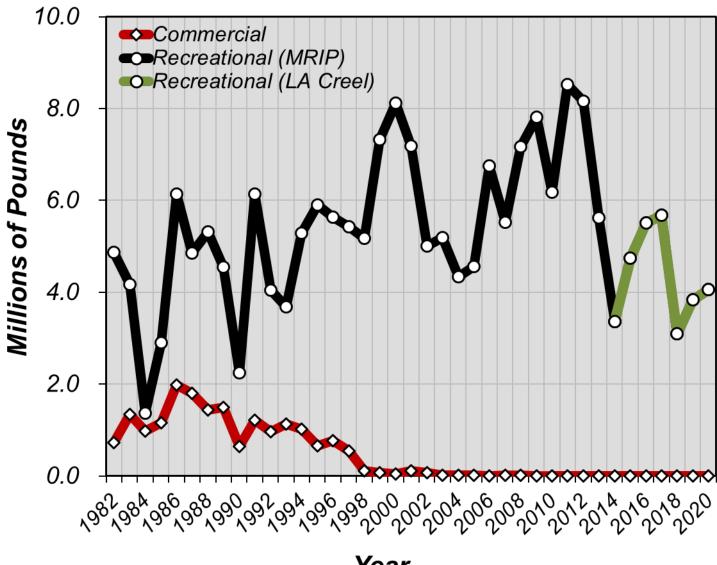
- In 2020 LDWF presented management options to the Commission and then held public meetings
- LDWF presented the results of the public meetings and surveys conducted via email and web
- In October 2020 LDWF brought forward a NOI to adjust recreational size and bag limits (15 fish at 13.5 inches)
- Commission heard from recreational groups and anglers about good catches and directed LDWF to wait one year, re-run the stock assessment, re-survey the public, and present those findings in 2021
- Today LDWF will provide landings and age data, sampling data, results of the 2021 stock assessment (data through 2020), basin specific trends, and new projections of management options



# Fishery Landings



## Landings (1982-2020)

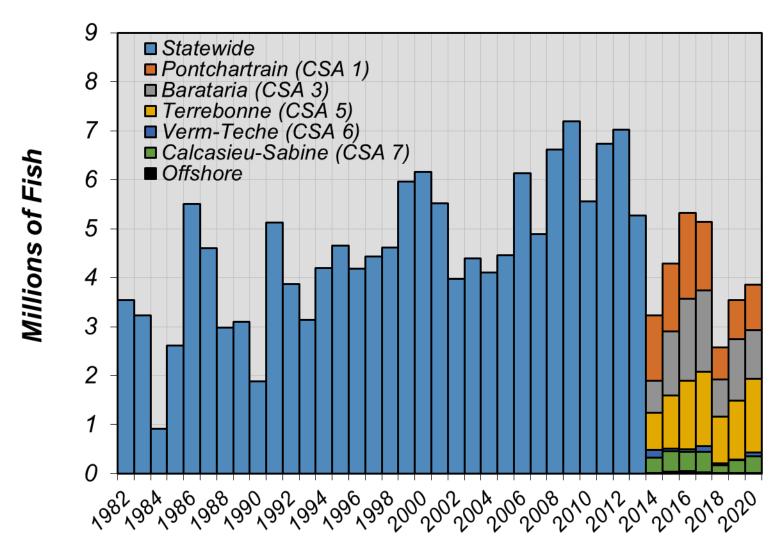




Note: 1982-2013 recreational landings values are MRIP data back-calculated to LA Creel. 2014-2020 landings values are LA Creel values.

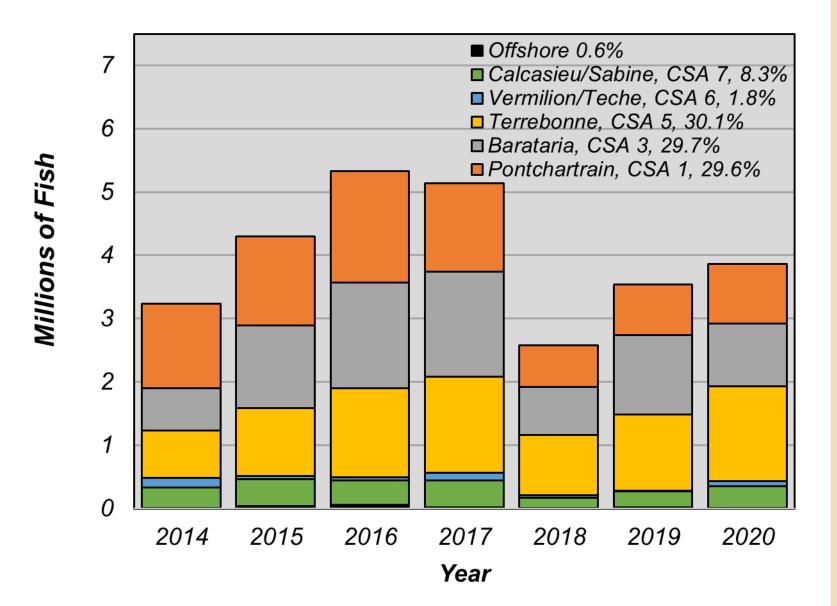


#### Recreational Landings (1982-2020)



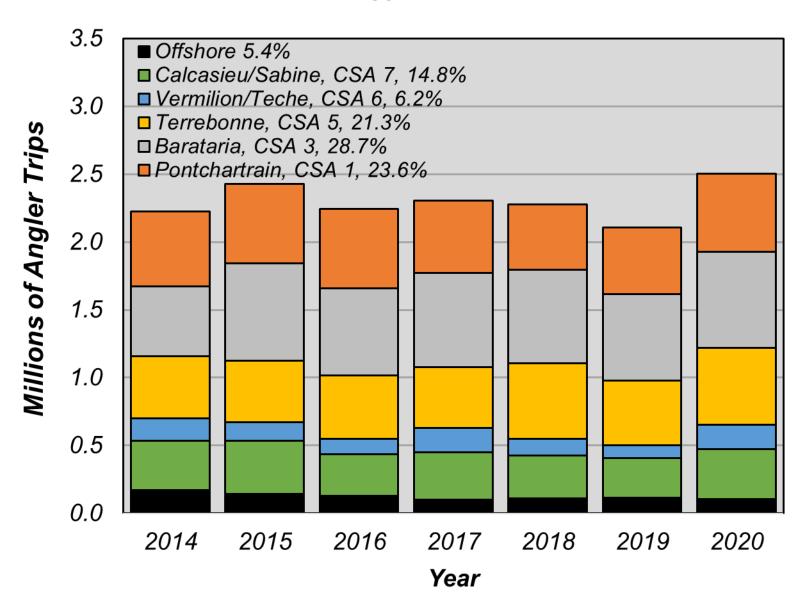


#### Recreational Landings (2014-2020)



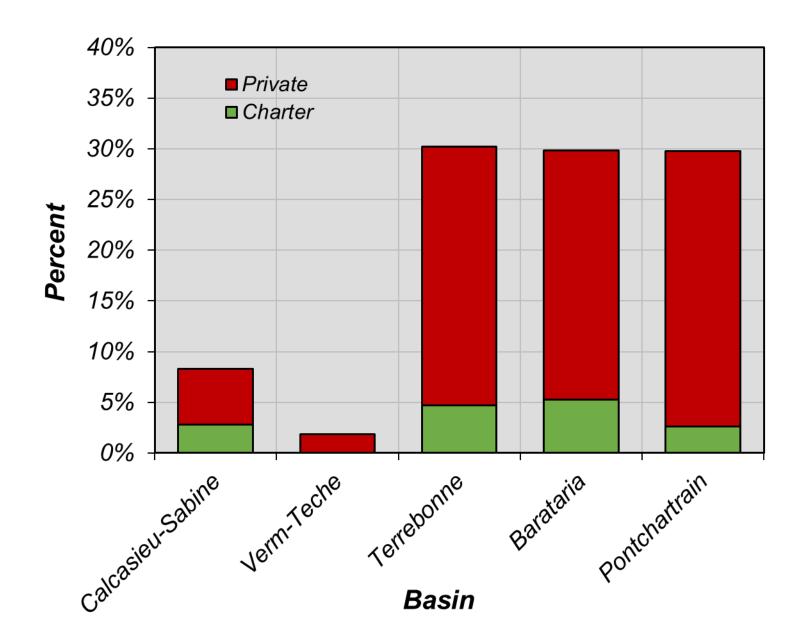


#### Recreational Effort (2014-2020)



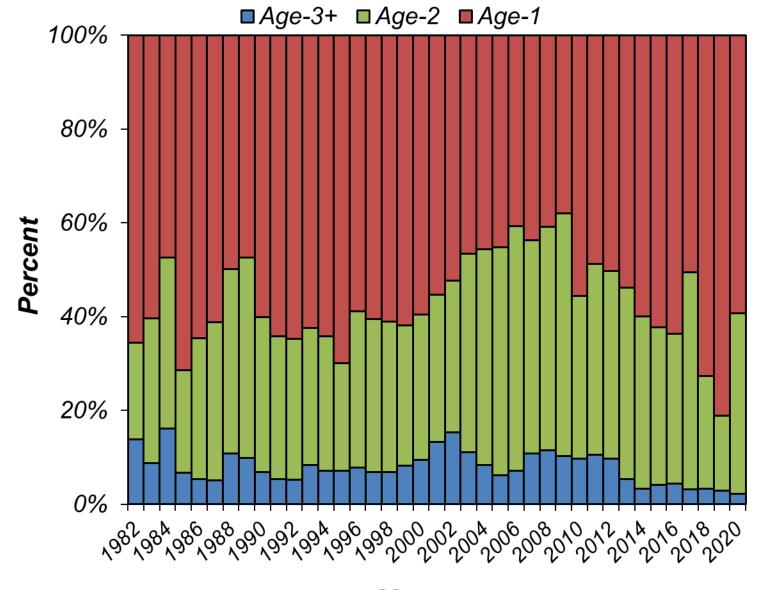


## Recreational Landings (2014-2020)





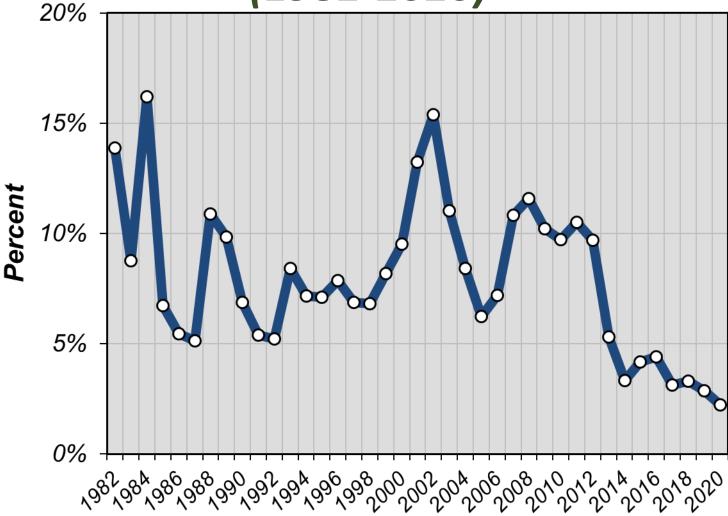
#### Age Composition Female Landings (1982-2020)





Year

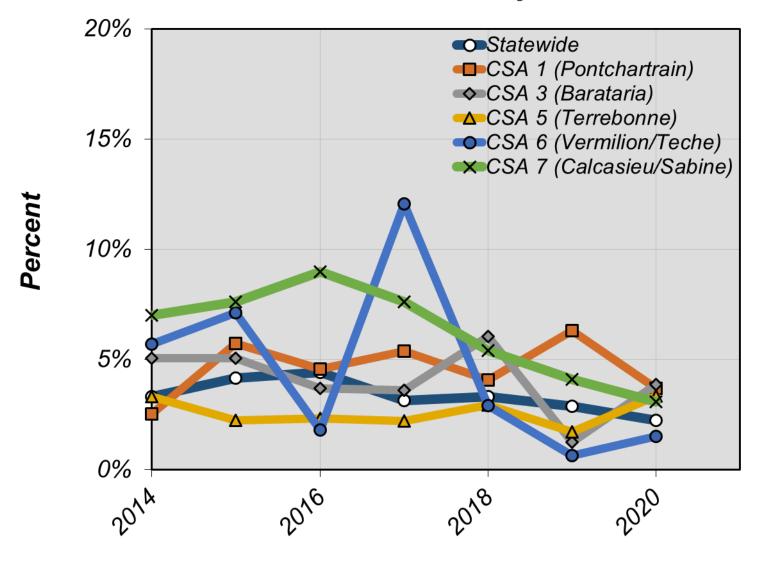
Percent of Female Landings Age-3+ (1982-2020)





Year

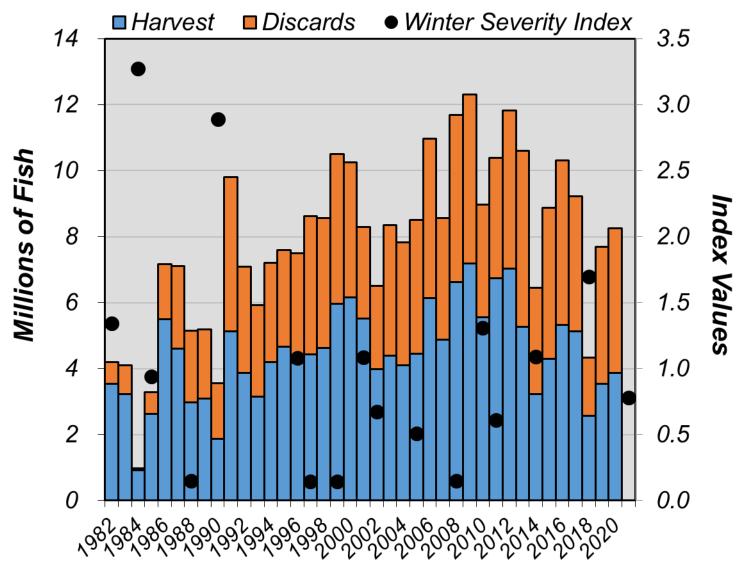
# Percent of Female Landings Age-3+ (2010-2020) \*Recreational Only





Year

## Winter Severity Index

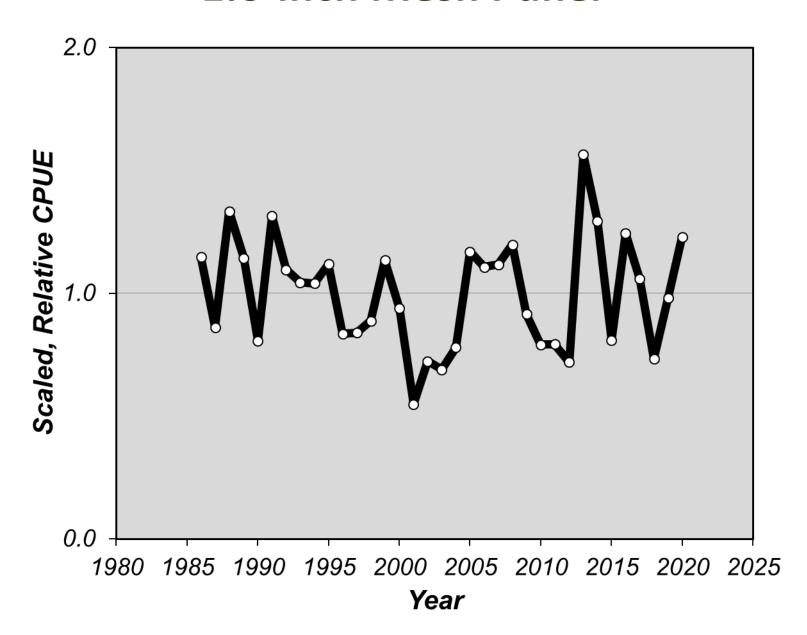




# Gillnet Survey

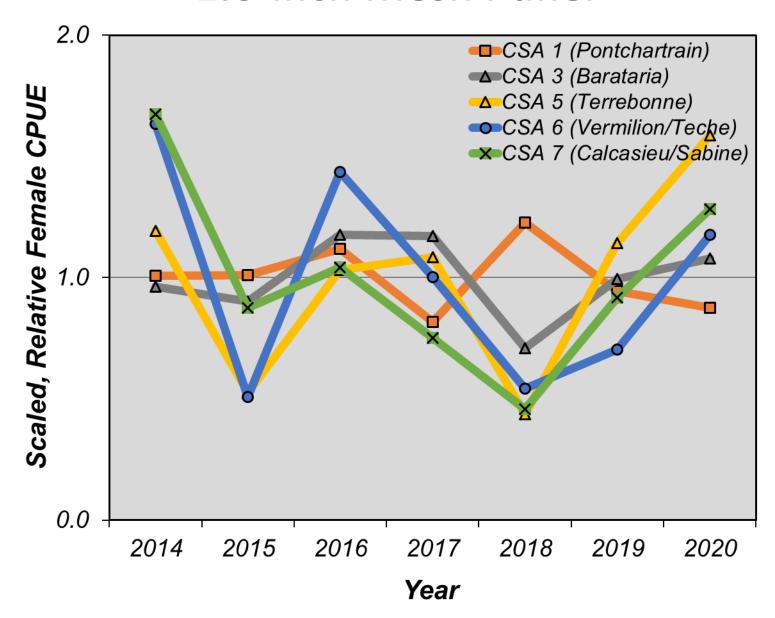


#### 1.0-inch Mesh Panel



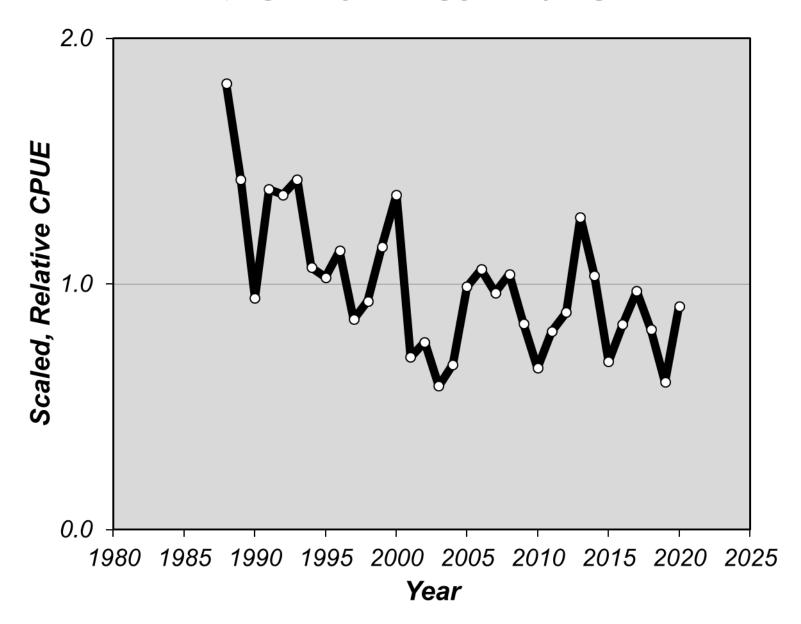


#### 1.0-inch Mesh Panel



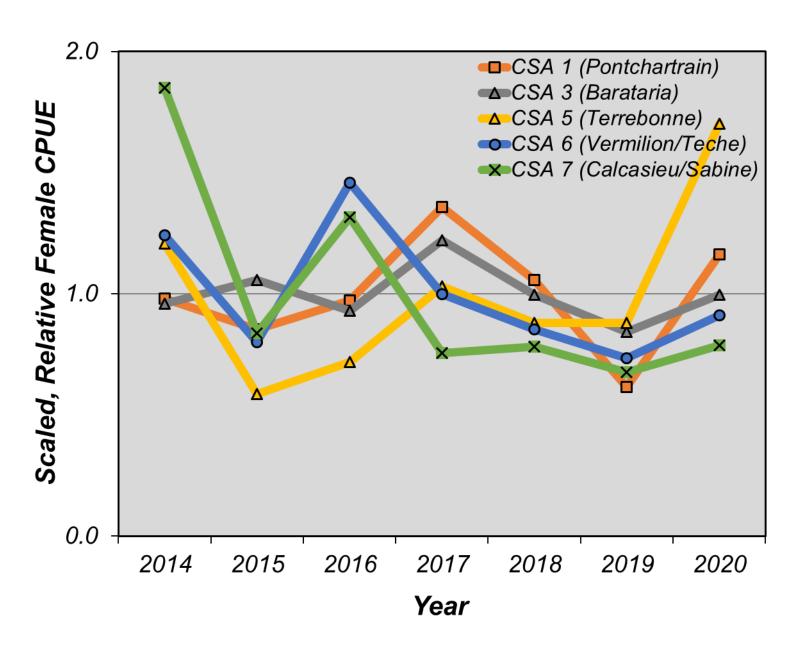


#### 1.25-inch Mesh Panel



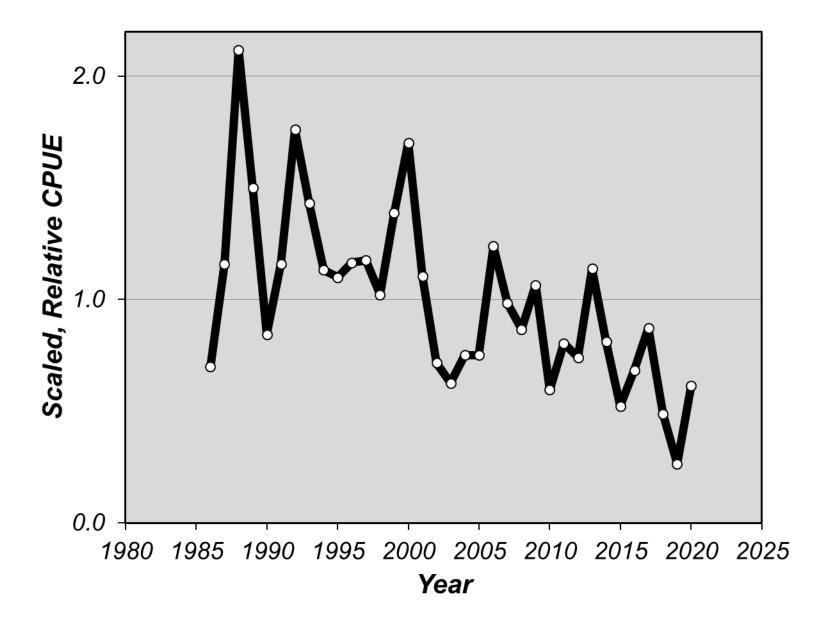


#### 1.25-inch Mesh Panel



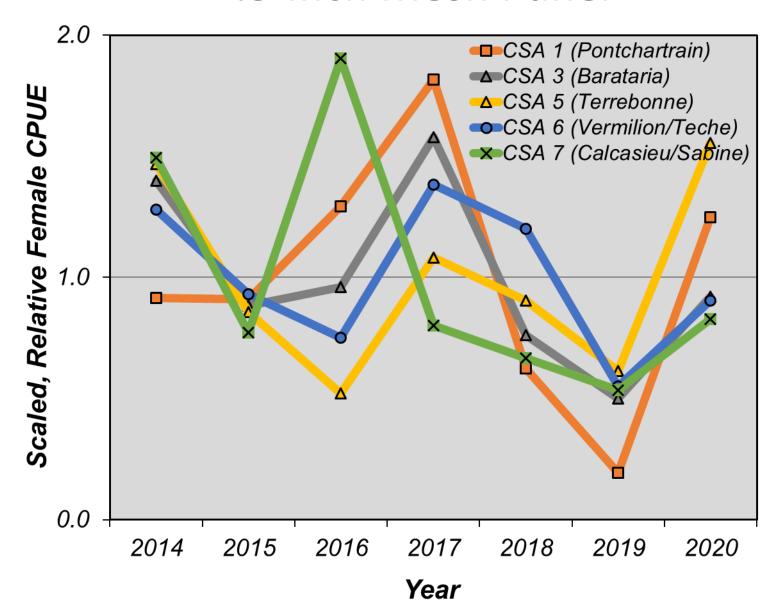


#### 1.5-inch Mesh Panel





#### 1.5-inch Mesh Panel

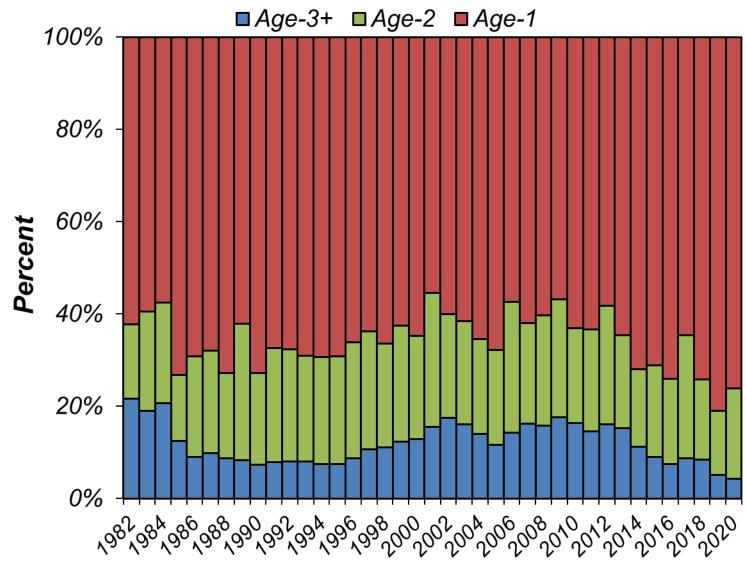




# Stock Assessment Results



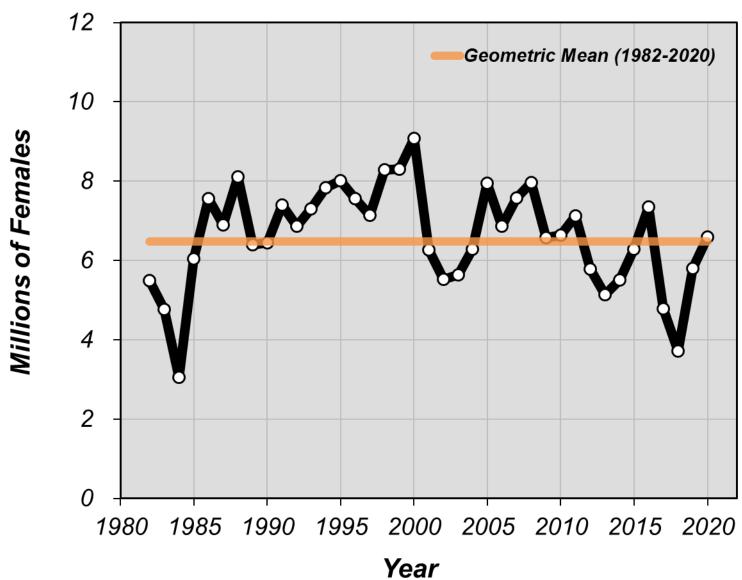
## Age Composition Female Stock





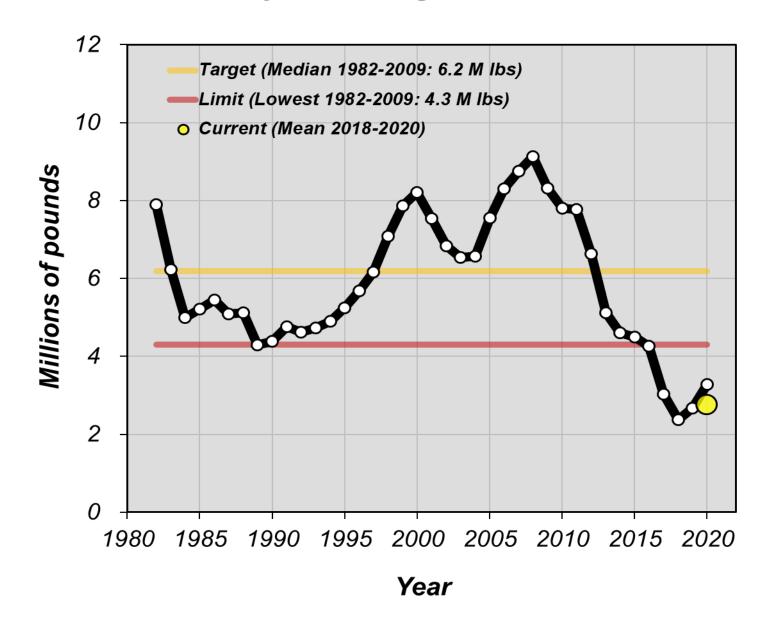
Year

## **Age-1 Female Recruits**



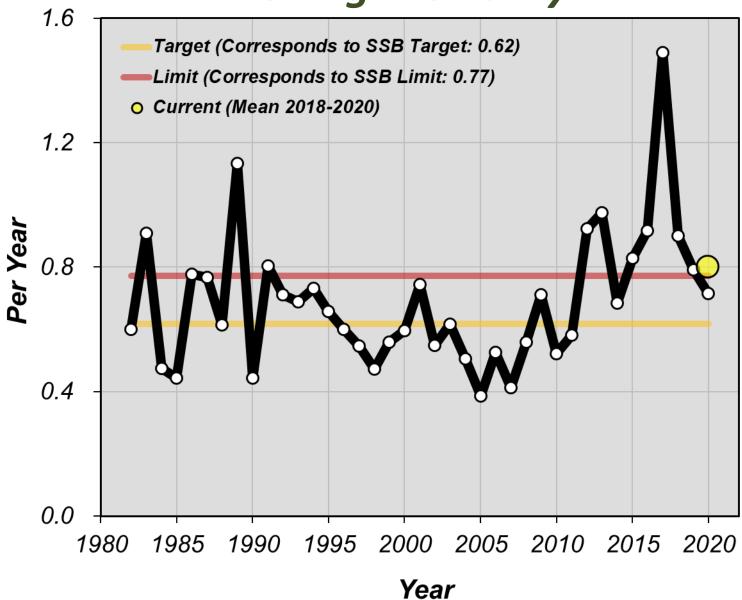


## Female Spawning Stock Biomass





## **Fishing Mortality**





#### **Assessment Summary**

- Spotted seatrout stock is overfished with overfishing currently occurring
- Overfishing has occurred frequently in the most recent decade (70%)
- Spawning stock biomass and SPR are at the lowest levels seen in the history of the assessment
- Proportion of older fish (age-3+) in the stock at lowest levels seen
- Recent landings at lowest level observed since the early 1990's
- An experimental winter severity index has been reviewed that helps explain the low landings observed following severe winters



# Stock Projections

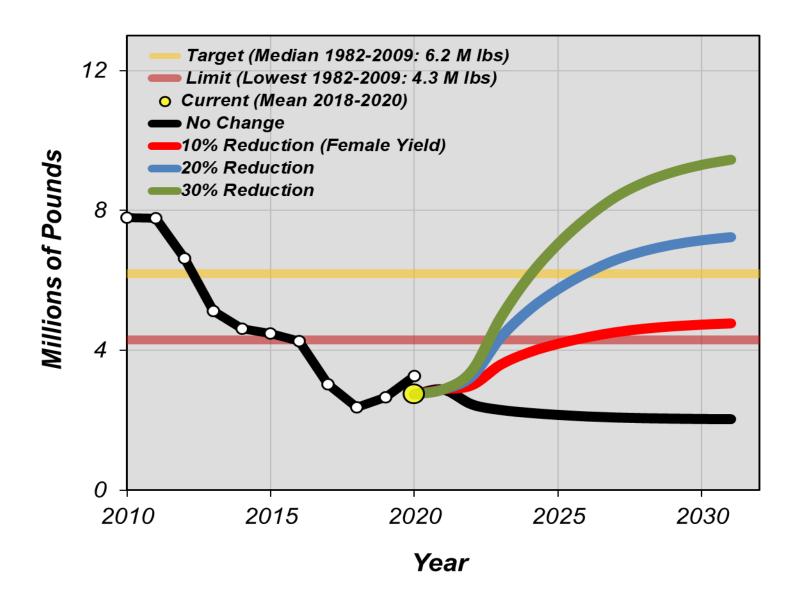


#### **Projection Summary**

- Ten-year stock projection (2022-2031) of base model
- Projected population metrics are stock status indicators only (SSB, SPR, and average F)
- Future recruitment levels assumed equivalent to the most recent decade (mean 2011-2020)
- Future winter severity impacts also assumed equal to most recent decade (mean 2011-2020)
- Each management scenario represents a specific percent savings of female landings in terms of weight (5, 10, 15, 20, 25, and 30%)



#### Female Spawning Stock Biomass





# Fishery Reductions

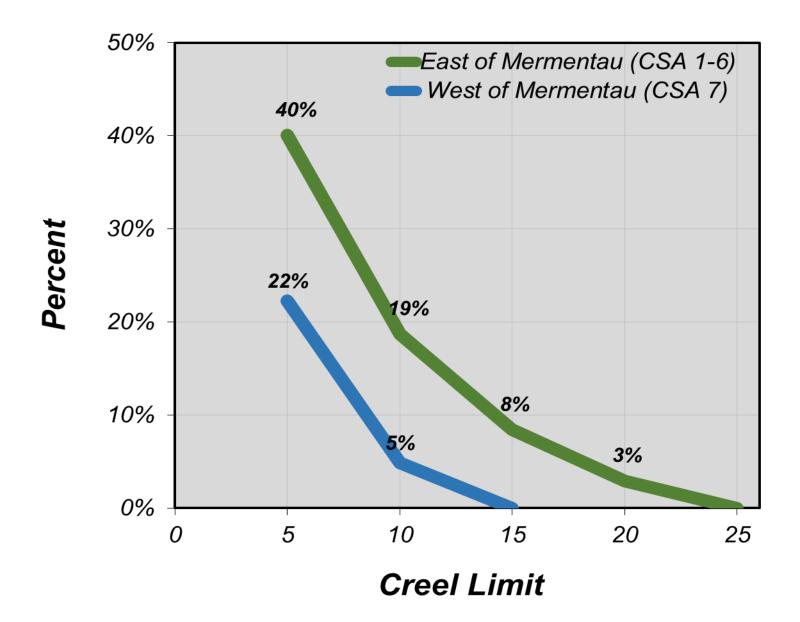


## Fishery Reductions Summary

- Fishery reductions calculated from the LDWF Recreational Creel and Biological Sampling Programs (2018-2020)
- Reductions in terms of female yield reductions
- Reductions from creel and size limit changes only
- Creel limit reductions based on future directed effort remaining comparable to current
- Size limit reductions based on a 10% discard mortality assumption

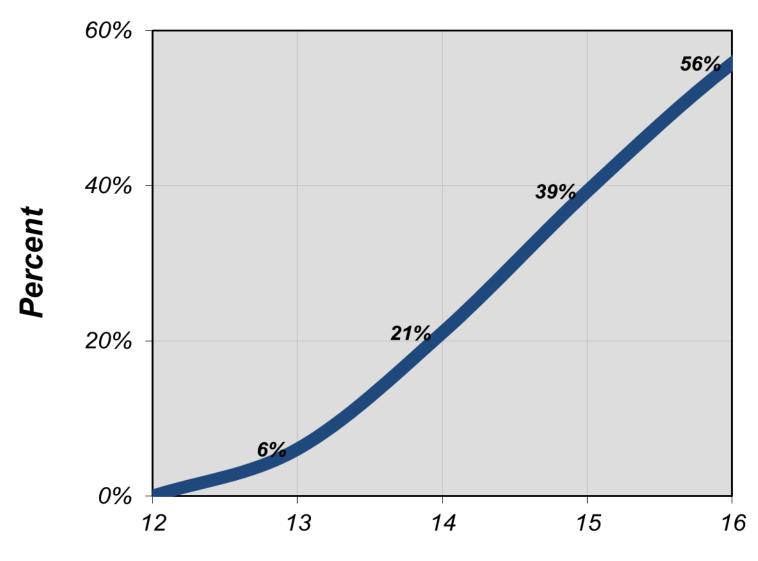


#### **Creel Limit Reductions**





#### Minimum Size Limit Reductions





Minimum Size Limit

# Size and Creel Options

25%

<b>Minimum Size</b>	Creel	Reduction
12"	9	21%
12.5"	10	21%
13"	11	21%
13.5"	15	20%
14"	25	21%
Slot Limit	Creel	Reduction
	CICCI	Reduction
12" - 20"	11	20%
12" - 20"	11	20%

25

14" - 20"



## Next Steps

- Recover stock (SSB, SPR) to target or above by 2027(5 year recovery timeline)
- Recovery options:
  - Creel limit changes only
  - Size limit changes only (including slot limits)
  - Any combination of creel and size limit changes
  - Supplemental: Special regulations following significant freeze events (will require further development of options)
  - Alternative: Seasonal or areal closures (not recommended)



# Next Steps

 Guidance from the LWFC on Management Options

 Guidance on bringing forward a Notice of Intent at the December or January meeting to begin addressing the problems with the stock



# Questions?



Jason Adriance LDWF Biologist DCL-B 504-284-2032 jadriance@wlf.la.gov